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Water Supply Outlook For Nevada



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

NEVADA DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

AS OF
Jan. 1, 1984

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefor subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SPRING IS ON THE WAY.

Published by Soil Conservation Service

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland Oregon 97209.

Copies of state and local reports may also be obtained from the state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	2490 W. 26th Avenue, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th St., Boise, Idaho 83702
Montana	32 E. Babcock, Bozeman, Montana 59715
Nevada	P.O. Box 4850, Reno Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	100 E. "B" St., Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 - -- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



Water Supply Outlook For Nevada

**AND
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS**



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All Averages are for 1961-1980 period

WATER SUPPLY OUTLOOK FOR NEVADA

SNOW MEASUREMENTS

A majority of the snow measurements for the January 1, 1984 Water Supply Outlook are taken from the SNOTEL system.

The snowpack in Nevada and on the eastern slope of the Sierra is again above average for the second year in a row. The January 1 snow water content is approximately 200% of average in the Tahoe Basin, 185% in the Truckee Basin, 200% in the Carson Basin, 215% in the Walker Basin, 325% in the Upper Humboldt, 320% in the Lower Humboldt, 290% in the Owyhee Basin, 235% in the Snake River Basin, and 245% in the Northern Great Basin.

The snowpack in the Tahoe, Truckee, Carson, and Walker Basins is greater than recorded last year at this time. Last year the snowpack was the largest on record and this year holds the promise of being very similar.

The Humboldt Basin snowpack is exceptional for this time of year. The Tremewan Ranch snow course recorded 5.4 inches of water content on December 29, 1983 as compared to an average of 1.0 inch and a reading of 1.9 inches last year. The Taylor Canyon snow course was read December 29, 1983 and the survey showed 10.6 inches of water as compared to an average of 2.1 inches and 5.1 reading last year.

Snowpack readings in the eastern portion of the state are also above last year's SNOTEL readings. Ward Mountain #2 is 1.2 inches above last year's value and 5.7 inches above the estimated average. Berry Creek is 3.6 inches ahead of last year and 5.8 inches above the estimated average.

The Mount Rose Ski Area water content on December 29, 1983 was 37.1 inches. The water content last year on the same date was 33.4 inches. The Echo Summit snow course water content was 27.8 inches this year and 21.3 inches last year.

The total precipitation received in the Sierra during the last two water years have been extraordinary. During the period October 1, 1981 until December 31, 1983 Ward Creek has accumulated 294.2 inches of precipitation while the Mount Rose Ski Area gage has received 229.8 inches.

RESERVOIR STORAGE

Reservoir storage on January 1 is slightly higher than last year. The combined total useable storage of seven major reservoirs is 1,211,000 acre-feet as compared to 1,070,000 acre-feet last year.

Lake Tahoe contains 652,000 acre-feet of useable storage as compared to 570,000 acre-feet last year at this time. Water is being released from Lake Tahoe to accomodate for runoff during the spring. The level of Pyramid Lake has risen 2.53 feet from October 3, 1983 to December 28, 1983. The level of Pyramid Lake is expected to continue to rise.

Storage on the Lower Colorado River is above that recorded last year. The current useable storage in Mohave is 1,658,000 acre-feet as compared to 1,646,000 acre-feet last year. Lake Mead's useable storage is 24,751,000 acre-feet compared to 23,151,000 last year, an increase of 1,600,000 acre-feet.

STREAMFLOW FORECASTS

Streamflow throughout Nevada and on the east Slope of the Sierra will continue to be well above average for the coming spring and summer. Forecasts made at this time assume average precipitation for the remainder of the season.

STREAMFLOW FORECASTS (Thousand Acre Feet) as of: January 1, 1984

Forecasts are based on snow-water presently stored in the mountain watersheds and the assumption that precipitation will be near average throughout the forecast period. Peak flow forecasts indicate the most probable range for the maximum average 24-hour flow.

FORECAST POINT	Forecast Period	Forecast This Year	This Year as Percent of Average	Average †
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TRUCKEE RIVER

Truckee River at Farad, CA ^{1/}	April-July	500	186	269
Lake Tahoe Rise in feet (assuming gates closed)	April 1 to high	2.7	194	1.39
Little Truckee River above Boca, CA	April-July	165	190	78
Washoe Lake Rise in feet (assuming gates closed)	April 1 to high	3.9	130	3.0e

CARSON RIVER

East Carson near Gardnerville, NV	April-July	350	187	187
West Carson at Woodfords, CA	April-July	95	179	53
Carson River near Carson City, NV	April-July	395	217	182
Carson near Fort Churchill, NV	April-July	375	226	166

WALKER RIVER

East Walker near Bridgeport, CA ^{2/}	April-Aug.	150	227	66
West Walker below Little Walker near Coleville, CA	April-July	275	186	148

HUMBOLDT RIVER

Lamoille Creek near Lamoille, NV	April-July	45	156	29
S. Fork Humboldt above Dixie Creek, NV	April-July	150	200	75
Marys River above Hot Springs, NV	April-July	70	190	37
N. Fork Humboldt at Devils Gate, NV	April-July	75	215	35
Humboldt River at Palisade, NV	April-July	560	243	230
Humboldt River at Comus, NV	April-July	460	266	173
Martin Creek near Paradise, NV	April-July	30	190	16

SNAKE RIVER

Owyhee River near Gold Creek, NV ^{3/}	April-July	50	184	27
Owyhee River near Owyhee, NV ^{3/}	April-July	180	219	82

NOTE: Streamflow forecasts which appear in this Bulletin are a coordinated activity of the National Weather Service and the Soil Conservation Service.

1/ Observed flow plus change in storage in Boca, Stampede and Prosser Reservoirs, Donner, Independence, and Martis Creek Lakes and minus the flow at Truckee River at Tahoe City, California.

2/ Observed flow plus change in storage in Bridgeport Reservoir.

3/ Observed flow plus change in storage in Wild Horse Reservoir.

+1961-1980 period.

RESERVOIR STORAGE (Thousand Acre Feet) AS OF January 1, 1984

Basin or Stream	RESERVOIR	Usable Capacity	Usable Storage		
			This Year	Last Year	Average†
Owyhee	Wild Horse	72	59	53	27
Lower Humboldt	Rye Patch	194	164	168	89
Colorado	Mohave	1,810	1,658	1,646	1,589
Colorado	Mead	26,159	24,751	23,151	17,421
Tahoe	Tahoe	732	652	570	351
Truckee	Boca	41	28	19	17
Truckee	Stampede**	220	205	210	96
Truckee	Prosser***	30	10	9	8
Carson	Lahontan	291	242	201	166
West Walker	Topaz	59	41	35	27
East Walker	Bridgeport	42	25	24	24

† Adjusted average.
 ** Storage began August 1, 1969.
 *** Flood Control use allocation of 20,000 acre-feet between November 1 and April 10.

1961-1980 Average

TOTAL RESERVOIR STORAGE (Thousand Acre Feet)

MONTH	This Year	Last Year	Average †
October 1	705	1,172	
January 1	1,211	1,070	701
February 1		1,114	
March 1		1,089	
April 1		1,079	
May 1		972	

The above data developed from Wild Horse, Rye Patch, Tahoe, Boca, Lahontan, Topaz, and Bridgeport Reservoirs in 1,000 Acre-feet.
 TOTAL USABLE CAPACITY

PEAK FLOWS (MAXIMUM MEAN DAILY) (Av. flow for 24 hrs. on day of greatest flow)

FORECAST POINT	PEAK FLOW (SECOND FEET)	
	Forecast Range	Average †
No forecast issued January 1		

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
No forecast issued January 1			

SNOW COURSE MEASUREMENTS

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
					Last Year	Average †
NAME	Elevation					
<u>TAHOE-TRUCKEE BASIN</u>						
Big Meadows	8,300	01/01/84	61	20.6s	19.4e	----
Brockway Summit (CA)	7,100	12/30/83	40	13.9	NS	----
Central Sierra Snow Lab	6,900	01/01/84	76	28.6	25.2	----
Donner Summit (CA)	6,900	01/03/84	63	20.7	31.0	15.4
Echo Peak (CA)	7,800	01/02/84	107	40.8s	28.7s	17.8
Echo Summit (CA)	7,450	01/04/84	70	27.8	21.3	12.5
Fallen Leaf (CA)	6,300	01/02/84	6	2.2s	7.5	4.0e
Glenbrook (CA)	6,900	01/02/84	22	7.6	NS	----
Hagan's Meadow (CA)	8,000	01/01/84	41	16.5s	11.3s	7.4
Heavenly Valley (CA)	8,800	01/01/84	70	23.7s	20.5	11.8
Independence Camp (CA)	7,000	01/01/84	39	15.0s	15.1s	8.1
Independence Creek (CA)	6,500	01/01/84	28	10.7s	10.9s	5.6e
Independence Lake (CA)	8,450	01/04/84	99	33.6s	22.8s	18.6e
Mariette Lake	8,000	01/01/84	60	20.4s	18.2s	8.6
Mount Rose	9,000	01/01/84	87	29.4s	24.7s	13.9e
Mount Rose Ski Area	8,850	12/29/83	110	37.1	33.4s	17.2
Richardson #2 (CA)	6,500	01/01/84	24	8.6	NS	----
Rubicon #2 (CA)	7,500	12/31/83	56	21.7s	21.4s	13.1e
Squaw Valley Gold Coast (CA)	8,200	01/01/84	103	34.5s	35.9s	18.5e
Tahoe City Cross (CA)	6,750	12/30/83	35	13.5	13.7s	7.3e
Truckee #2 (CA)	6,400	12/30/83	23	8.1	12.4s	6.4e
Ward Creek #2 (CA)	7,000	12/29/83	84	32.1		13.1
Ward Creek #3 (CA)	6,750	01/01/84	65	24.8s	23.2s	12.1
<u>CARSON WALKER BASIN</u>						
Blue Lakes (CA)	8,000	01/01/84	69	23.4s	23.3s	15.6e
Ebbetts Pass #2 (CA)	8,700	01/01/84	99	33.4s	25.6s	16.1e
Leavitt Meadows (CA)	7,200	01/01/84	25	9.7s	11.9s	4.4
Lobdell Lake (CA)	9,200	01/01/84	45	15.3s	15.1s	7.3e
Poison Flat #2 (CA)	7,900	01/01/84	32	11.0s	13.5s	4.8
Sonora Pass Bridge (CA)	8,800	01/01/84	63	21.4s	19.6s	9.9
Spratt Creek (CA)	6,100	01/01/84	9	3.1s	6.7s	----
Virginia Lakes Ridge (CA)	9,200	01/01/84	49	16.5s	13.1s	7.0
Wet Meadows #2 (CA)	8,050	01/01/84	95	32.5s	26.0s	12.0e
<u>NORTHERN GREAT BASIN</u>						
Cedar Pass (CA)	7,100	01/01/84	40	14.9s	9.2s	8.1e
Disaster Peak	6,500	01/02/84	48	17.2s	10.3s	5.4e
Dismal Swamp #2 (CA)	7,000	01/01/84	71	26.7s	16.1s	10.5e
<u>SNAKE RIVER</u>						
Bear Creek	7,800	01/02/84	70	19.7s	10.9s	17.7
Goat Creek	8,800	12/28/83	64	16.8	8.4s	7.5
Pole Creek Ranger Station	8,300	12/28/83	63	16.8	8.8s	8.2
Seventy Six Creek	7,100	01/01/84	53	15.5s	8.2s	5.3e
<u>OWYHEE RIVER</u>						
Big Bend	6,700	01/01/84	41	13.0s	5.0s	3.4
Fawn Creek	7,000	01/01/84	64	18.6s	10.6s	5.3e
Jack Creek #2, Upper	7,250	01/01/84	67	19.6s	15.2s	6.0e
Laurel Draw	6,700	01/01/84	42	13.6s	5.1	3.2e
Taylor Canyon	6,200	12/29/83	34	10.9s	5.1	2.0
<u>EASTERN NEVADA</u>						
Berry Creek	9,100	01/03/84	47	12.2s	8.6s	6.4e
Diamond Peak	8,040	12/30/83	20	5.5s	NS	----
Hole-in-Mountain	7,900	01/01/84	108	29.2s	7.5s	10.0e
Ward Mountain #2	7,400	01/03/84	33	9.5s	8.3s	3.8e
<u>HUMBOLDT</u>						
Big Creek Summit	8,700	01/01/84	77	20.0s	10.3s	----
Buckskin, Lower	6,700	01/01/84	41	13.1s	6.6s	3.6e
Corral Canyon	8,500	12/30/83	62	16.1s	6.8s	5.0e
Dorsey Basin	8,100	01/01/84	70	18.9s	9.9s	5.5e
Draw Creek	7,200	01/01/84	56	16.2s	NS	----
Granite Peak	7,800	12/30/83	99	26.9s	18.5s	7.6e
Green Mountain	8,000	01/01/84	90	24.4s	8.1s	5.8e
Lamance Creek	6,000	01/01/84	77	23.0s	8.3s	4.4e
Lamoille #3	7,700	01/01/84	53	14.4s	7.7s	5.0e
Tremewan Ranch	5,700	12/29/83	21	5.4	1.9	0.8

SNOW COURSE MEASUREMENTS

SNOW COURSE MEASUREMENTS		THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	
NAME	Elevation				Last Year	Average †
DESERT RESEARCH INSTITUTE MEASUREMENTS						
TAHOE-TRUCKEE BASIN						
Alder Creek	6,960	01/01/83	72	28.6	20.3	----
Apollo Way	7,300	01/01/83	40	14.6	14.6	----
Bennett Flat	6,200	01/01/83	25	8.8	12.4	----
Brockway Summit	7,200	01/01/83	52	15.2	17.8	----
Clear Creek	5,700	01/01/83	0	0	1.2	----
Cliff Ranch, Franktown	5,250	01/01/83	1	T	0.2	----
Davis Creek	5,160	01/01/83	0	0	0.1	----
Evergreen Hills	5,700	01/01/83	0	0	1.8	----
Fuller Lake	6,200	01/01/83	0	0	2.9	----
Galena Lake	7,440	01/01/83	48	16.6		----
Hennes Pass Junction	6,410	01/01/83	26	9.0	9.9	----
Hobart Mills	5,850	01/01/83	12	4.3	8.8	----
Incline Lake	8,000	01/01/83	73		23.1	----
Jones Creek	6,000	01/01/83	1	T	2.6	----
Junction 395 & Nevada 27	4,590	01/01/83	0	0	0	----
Lancer	5,110	01/01/83	0	0	T	----
Little Valley	6,540	01/01/83	12	4.7	10.3	----
Mount Rose Resort	8,280	01/01/83	81	29.3	26.5	----
North Star Fire Department	6,320	01/01/83	8	2.9	7.0	----
RNR Forestry Site	6,400	01/01/83	17	2.8	8.3	----
Reindeer Lodge	7,060	01/01/83	21	9.2	14.8	----
Sagehen Creek	6,340	01/01/83	21	8.0	9.0	----
Sky Tavern	7,620	01/01/83	49	18.7	19.6	----
Slide Mountain	9,650	01/01/83	90	32.4	30.0	----
Spooner Summit	7,620	01/01/83	35	12.6	13.8	----
Squaw Valley Fire Department	6,240	01/01/83	26	10.2	16.9	----
Tahoe City	6,240	01/01/83	23	8.3	11.6	----
Tahoe Meadows	8,540	01/01/83	102	36.5	33.0	----
Tamarack Lake	8,820	01/01/83	79	30.4	29.3	----
Third and Incline Creeks	6,235	01/01/83	0	0	4.2	----
Thunder Cliff	6,200	01/01/83	25	9.2	12.7	----
Truckee-Tahoe Airport	5,900	01/01/83	2	T	4.1	----
Whites Creek	5,670	01/01/83	0	0	1.2	----

T=TRACE

PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT RECORD			PAST RECORD
		PERIOD OF MEASUREMENT	PRECIPITATION FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/83	ACCUM. PRECIP. PREVIOUS YEAR
TAHOE-TRUCKEE					
Big Meadows	8,300	10/1/83 to 10/31/83	2.3	2.3	5.5
		11/1/83 to 11/30/83	12.1	14.4	12.6
		12/1/83 to 12/31/83	7.9	22.3	20.8
Central Sierra Snow Lab (CA)	6,900	10/1/83 to 10/31/83	6.5	6.5	10.4
		11/1/83 to 11/30/83	23.7	30.2	23.1
		12/1/83 to 12/31/83	23.8	54.0	35.8
Echo Peak (CA)	7,900	10/1/83 to 10/31/83	3.8	3.8	8.2e
		11/1/83 to 11/30/83	24.7	28.5	21.3e
		12/1/83 to 12/31/83	26.2	54.7	36.6e
Fallen Leaf (CA)	6,240	10/1/83 to 10/31/83	1.0	1.0	4.0
		11/1/83 to 11/30/83	7.8	8.8	10.4
		12/1/83 to 12/31/83	5.1	13.9	18.3
Hagan's Meadow (CA)	8,000	10/1/83 to 10/31/83	1.7	1.7	3.0
		11/1/83 to 11/30/83	11.3	13.0	7.3
		12/1/83 to 12/31/83	8.2	21.2	13.8
Heavenly Valley (CA)	8,900	10/1/83 to 10/31/83	1.6	1.6	4.5
		11/1/83 to 11/30/83	12.3	13.9	11.8
		12/1/83 to 12/31/83	8.8	22.7	18.3
Independence Camp (CA)	7,000	10/1/83 to 10/31/83	3.6	3.6	6.3
		11/1/83 to 11/30/83	14.0	17.6	11.4
		12/1/83 to 12/31/83	9.9	27.5	18.0
Independence Creek (CA)	6,500	10/1/83 to 10/31/83	3.1	3.1	6.4
		11/1/83 to 11/30/83	17.0	20.1	12.0
		12/1/83 to 12/31/83	9.9	30.0	19.5
Independence Lake (CA)	8,450	10/1/83 to 10/31/83	3.5	3.5	8.3
		11/1/83 to 11/30/83	18.5	22.0e	15.2
		12/1/83 to 12/31/83	13.4	35.4	24.8
Marlette Lake	8,000	10/1/83 to 10/31/83	2.5	2.5	4.6
		11/1/83 to 11/30/83	12.6	15.1	12.9
		12/1/83 to 12/31/83	9.6	24.7	20.2
Mount Rose	9,000	10/1/83 to 10/31/83	3.6	3.6	5.2
		11/1/83 to 11/30/83	12.4	16.0	13.5
		12/1/83 to 12/31/83	9.6	25.6	21.0
Mount Rose Ski Area	8,850	10/1/83 to 10/31/83	3.7	3.7	7.5
		11/1/83 to 11/30/83	20.8	24.5	20.3
		12/1/83 to 12/31/83	15.5	39.0e	36.0
Rubicon #2 (CA)	7,500	10/1/83 to 10/31/83	3.6	3.6	8.3
		11/1/83 to 11/30/83	15.7	19.3	16.7
		12/1/83 to 12/31/83	13.7	33.0	25.3
Squaw Valley Gold Coast (CA)	7,800	10/1/83 to 10/31/83	6.0	6.0	10.3
		11/1/83 to 11/30/83	23.4	29.4	23.6
		12/1/83 to 12/31/83	22.1	51.5	34.2
Tahoe City Cross (CA)	6,750	10/1/83 to 10/31/83	2.8	2.8	5.8
		11/1/83 to 11/30/83	16.0	18.8	12.8
		12/1/83 to 12/31/83	11.7	30.5	20.6
Truckee #2 (CA)	6,400	10/1/83 to 10/31/83	3.3	3.3	5.5
		11/1/83 to 11/30/83	13.4	16.7	11.5
		12/1/83 to 12/31/83	10.0	26.7	18.2
Ward Creek #3 (CA)	6,750	10/1/83 to 10/31/83	5.6	5.6	12.1
		11/1/83 to 11/30/83	31.0	36.6	24.1
		12/1/83 to 12/31/83	26.0	62.6	37.1

PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT RECORD				PAST RECORD
		PERIOD OF MEASUREMENT	PRECIPITATION FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/83	ACCUM. PRECIP. PREVIOUS YEAR	
<u>CARSON-WALKER</u>						
Blue Lakes (CA)	8,000	10/1/83 to 10/31/83	3.2	3.2	9.6	
		11/1/83 to 11/30/83	13.5	16.7	20.0	
		12/1/83 to 12/31/83	14.5	31.2	30.4	
Ebbetts Pass #2 (CA)	8,700	10/1/83 to 10/31/83	2.9	2.9	9.1	
		11/1/83 to 11/30/83	17.9	20.8	21.3	
		12/1/83 to 12/31/83	15.7	36.5	33.1	
Leavitt Meadows (CA)	7,200	10/1/83 to 10/31/83	1.2	1.2	7.4	
		11/1/83 to 11/30/83	14.3	15.5	13.6	
		12/1/83 to 12/31/83	10.6	26.1	19.4	
Lobdell Lake (CA)	9,200	10/1/83 to 10/31/83	3.1	3.1	3.7	
		11/1/83 to 11/30/83	6.1	9.2	8.8	
		12/1/83 to 12/31/83	6.5	15.7	15.0	
Pine Nut Creek (NV)	6,600	10/1/83 to 10/31/83			NR	
		11/1/83 to 11/30/83				
		12/1/83 to 12/31/83				
Poison Flat (CA)	7,900	10/1/83 to 10/31/83	1.5	1.5	6.8	
		11/1/83 to 11/30/83	12.3	13.8	13.8	
		12/1/83 to 12/31/83	9.0	22.8	20.8	
Sonora Pass Bridge (CA)	8,300	10/1/83 to 10/31/83	1.5	1.5	7.0	
		11/1/83 to 11/30/83	13.0	14.5	16.5	
		12/1/83 to 12/31/83	12.7	27.2	23.3	
Spratt Creek (CA)	6,080	10/1/83 to 10/31/83	1.8	1.8	7.2	
		11/1/83 to 11/30/83	14.2	16.0	14.8	
		12/1/83 to 12/31/83	9.8	25.8	22.1	
Virginia Lakes Ridge (CA)	9,200	10/1/83 to 10/31/83	0.8	0.8	3.2	
		11/1/83 to 11/30/83	8.3	9.1	8.6	
		12/1/83 to 12/31/83	8.5	9.1	15.4	
Wet Meadows #2 (CA)	8,050	10/1/83 to 10/31/83	2.8	2.8	9.0	
		11/1/83 to 11/30/83	17.4	20.2	19.5	
		12/1/83 to 12/31/83	16.2	36.4	28.6	
<u>HUMBOLDT</u>						
Big Creek Summit	8,700	10/1/83 to 10/31/83	2.1	2.1	2.2	
		11/1/83 to 11/30/83	5.5	7.6	4.2	
		12/1/83 to 12/31/83	8.5	16.1	8.4	
Buckskin, Lower	6,700	10/1/83 to 10/31/83	1.4	1.4	2.0	
		11/1/83 to 11/30/83	2.9	4.3	4.9	
		12/1/83 to 12/31/83	13.2	17.5	9.0	
Corral Canyon	8,500	10/1/83 to 10/31/83	1.8	1.8	3.6	
		11/1/83 to 11/30/83	5.4	7.2	5.7	
		12/1/83 to 12/31/83	9.3	16.5	10.3	
Dorsey Basin	8,100	10/1/83 to 10/31/83	3.2	3.2	4.0	
		11/1/83 to 11/30/83	8.1	11.3	6.5	
		12/1/83 to 12/31/83	12.5	23.8	12.3	
Draw Creek	7,200	10/1/83 to 10/31/83	1.6	1.6	NR	
		11/1/83 to 11/30/83	5.7	7.3		
		12/1/83 to 12/31/83	9.6	16.9		
Fry Canyon	6,700		NR	NR	NR	
Granite Peak	7,300	10/1/83 to 10/31/83	1.6	1.6	2.7	
		11/1/83 to 11/30/83	9.6	11.2	7.8	
		12/1/83 to 12/31/83	11.7	22.9	13.9	
Green Mountain	8,000	10/1/83 to 10/31/83	2.5	2.5	2.9	
		11/1/83 to 11/30/83	6.5	9.0	5.8	
		12/1/83 to 12/31/83	15.7	24.7	11.9	

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PRECIPITATION (Inches)

BASIN AND PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT RECORD			PAST RECORD
		PERIOD OF MEASUREMENT	PRECIPITATION FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/83	ACCUM. PRECIP. PREVIOUS YEAR
<u>HUMBOLDT (Cont.)</u>					
Lamance Creek	6,000	10/1/83 to 10/31/83	1.4	1.4	3.5
		11/1/83 to 11/30/83	8.3	9.7	7.3
		12/1/83 to 12/31/83	15.2	24.9	11.8
Lamoille #3	7,700	10/1/83 to 10/31/83	2.2	2.2	2.9
		11/1/83 to 11/30/83	7.4	9.6	5.8
		12/1/83 to 12/31/83	8.8	18.4	10.7
<u>SNAKE-OWYHEE</u>					
Bear Creek	7,800	10/1/83 to 10/31/83	2.7	2.7	2.8
		11/1/83 to 11/30/83	3.1	5.8	6.2
		12/1/83 to 12/31/83	15.2	21.0	11.4
Big Bend	6,700	10/1/83 to 10/31/83	1.6	1.6	2.7
		11/1/83 to 11/30/83	3.8	5.4	4.0
		12/1/83 to 12/31/83	6.9	12.3	5.9
Fawn Creek	7,000	10/1/83 to 10/31/83	2.4	2.4	4.8
		11/1/83 to 11/30/83	7.1	9.5	8.4
		12/1/83 to 12/31/83	13.8	23.3	12.8
Goat Creek	8,800	10/1/83 to 10/31/83	2.4	2.4	2.3
		11/1/83 to 11/30/83	6.6	9.0	4.2
		12/1/83 to 12/31/83	11.3	20.3	7.8
Jack Creek #2, Upper	7,250	10/1/83 to 10/31/83	2.3	2.3	4.7
		11/1/83 to 11/30/83	5.6	7.9	6.7
		12/1/83 to 12/31/83	9.4	17.3	11.8
Jacks Peak	8,420	10/1/83 to 10/31/83	3.2	3.2	5.9
		11/1/83 to 11/30/83	7.6	10.8	10.0
		12/1/83 to 12/31/83	10.8	21.6	17.2
Laurel Draw	6,700	10/1/83 to 10/31/83	1.6	1.6	3.4
		11/1/83 to 11/30/83	5.3	6.9	6.3
		12/1/83 to 12/31/83	11.1	18.0	9.6
Pole Creek Ranger Station	8,330	10/1/83 to 10/31/83	2.0	2.0	1.9
		11/1/83 to 11/30/83	3.9	5.9	3.6
		12/1/83 to 12/31/83	7.1	13.0	7.0
Seventy-Six Creek	7,100	10/1/83 to 10/31/83	1.8	1.8	2.8
		11/1/83 to 11/30/83	5.7	7.5	5.2
		12/1/83 to 12/31/83	8.9	16.4	8.2
Taylor Canyon	6,200	10/1/83 to 10/31/83	0.0	0.0	1.2
		11/1/83 to 11/30/83	2.9	2.9	1.9
		12/1/83 to 12/31/83	5.8	8.7	3.5
<u>EASTERN NEVADA</u>					
Berry Creek	9,100	10/1/83 to 10/31/83	1.5	1.5	2.2
		11/1/83 to 11/30/83	2.6	4.1	3.9
		12/1/83 to 12/31/83	7.6	11.7	8.0
Diamond Peak	8,040	10/1/83 to 10/31/83	1.7	1.7	NR
		11/1/83 to 11/30/83	1.9	3.6	
		12/1/83 to 12/31/83	3.9	7.5	
Hole-in-Mountain	7,900	10/1/83 to 10/31/83	2.4	2.4	3.9
		11/1/83 to 11/30/83	10.0	12.4	6.7
		12/1/83 to 12/31/83	16.9	29.3	10.6
Ward Mountain	8,900	10/1/83 to 10/31/83	1.9	1.9	2.8
		11/1/83 to 11/30/83	3.4	5.3	5.1
		12/1/83 to 12/31/83	5.4	10.7	9.2

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		PERIOD OF MEASUREMENT	PRECIPITATION FOR THE PERIOD	ACCUM. PRECIP. SINCE 10/1/83	ACCUM. PRECIP. PREVIOUS YEAR
NORTHERN GREAT BASIN					
Cedar Pass (CA)	7,100	10/1/83 to 10/31/83	1.2	1.2	4.6
		11/1/83 to 11/30/83	8.6	9.8	9.0
		12/1/83 to 12/31/83	14.1	23.9	15.0
Disaster Peak	6,500	10/1/83 to 10/31/83	1.0	1.0	2.1
		11/1/83 to 11/30/83	7.0	8.0	7.7
		12/1/83 to 12/31/83	10.9	18.9	11.5
Dismal Swamp #2, (CA)	7,050	10/1/83 to 10/31/83	2.0	2.0	4.8
		11/1/83 to 11/30/83	14.4	16.4	13.2
		12/1/83 to 12/31/83	20.4	36.8	21.9
SNOTEL Provisional					

AGENCIES COOPERATING IN COLLECTING DATA CONTAINED IN THIS BULLETIN

FEDERAL

Agricultural Research Service
Bureau of Reclamation
Fish and Wildlife Service
Forest Service
Geological Survey
Soil Conservation Service
U.S. District Court - Federal Water Master
NOAA, National Weather Service

STATE

California Cooperative Snow Surveys
California Department of Parks and Recreation
California Department of Water Resources
Colorado River Commission of Nevada
Idaho Cooperative Snow Surveys
Nevada Association of Conservation Districts
Nevada Department of Conservation & Natural Resources
 Division of Water Resources
 Nevada State Forester
 Division of Conservation Districts
Oregon Cooperative Snow Surveys
University of Nevada, Desert Research Institute
Utah Cooperative Snow Surveys

PRIVATE

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Kennecott Copper Corporation
Nevada Irrigation District
Owyhee Project North Board of Control
Owyhee Project South Board of Control
Pacific Gas and Electric Company
Pershing County Water Conservation District
Sierra Pacific Power Company
Truckee - Carson Irrigation District
Walker River Irrigation District
Washoe County Water Conservancy District

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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